



# Large-scale dexterous haptic interaction with virtual mock-ups: Methodology and human performance

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Résumé en anglais	We present a methodology for both the efficient integration and dexterous manipulation of CAD models in a physical-based virtual reality simulation. The user interacts with a virtual car mock-up using a string-based haptic interface that provides force sensation in a large workspace. A prop is used to provide grasp feedback. A mocap system is used to track user's hand and head movements. In addition a 5DT data-glove is used to measure finger flexion. Twelve volunteer participants were instructed to remove a lamp of the virtual mock-up under different conditions. Results revealed that haptic feedback was better than additional visual feedback in terms of task completion time and collision frequency.
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## Liens

[1] [http://okina.univ-angers.fr/publications?f\[author\]=1966](http://okina.univ-angers.fr/publications?f[author]=1966)

[2] <http://okina.univ-angers.fr/paul.richard/publications>

[3] [http://okina.univ-angers.fr/publications?f\[author\]=1967](http://okina.univ-angers.fr/publications?f[author]=1967)

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